

L Number	Hits	Search Text	DB	Time stamp
1	996	(resist photoresist) and (\$5acid near generator) and (sulfonic adj acid)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/07 15:18
2	877	((resist photoresist) and (\$5acid near generator) and (sulfonic adj acid)) and (onium sulfonium iodonium sulfonate nonionic non-ionic)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/07 15:19
3	0	((resist photoresist) and (\$5acid near generator) and (sulfonic adj acid)) and (onium sulfonium iodonium sulfonate nonionic non-ionic)) and (430/270.1.ccls)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/07 15:19
4	559	((resist photoresist) and (\$5acid near generator) and (sulfonic adj acid)) and (onium sulfonium iodonium sulfonate nonionic non-ionic)) and (430/270.1.ccls.)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/07 15:19
5	374	((resist photoresist) and (\$5acid near generator) and (sulfonic adj acid)) and (onium sulfonium iodonium sulfonate nonionic non-ionic)) and (430/270.1.ccls.)	USPAT	2003/08/07 15:56
6	0	wo-9410608-\$.did.	USPAT	2003/08/07 17:27
7	59	n-sulfonyloxyimide	USPAT	2003/08/07 15:57
8	28	n-sulfonyloxyimide and (((resist photoresist) and (\$5acid near generator) and (sulfonic adj acid)) and (onium sulfonium iodonium sulfonate nonionic non-ionic)) and (430/270.1.ccls.))	USPAT	2003/08/07 15:57
9	0	wo-940010608-\$.did.	USPAT	2003/08/07 17:27
10	0	wo-94010608-\$.did.	USPAT	2003/08/07 17:28
13	4	("5296332") or ("6280911")).PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/07 18:11
-	2	("20030027061").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/06 16:36
-	0	20030027061.URPN.	USPAT	2003/08/06 16:35
-	0	alpha,alpha-difluoroalkyl adj sulfonic adj acid	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/06 16:36
-	2	\$.difluoroalkyl adj sulfonic adj acid	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/06 16:37
-	2	\$.difluoro\$8yl adj sulfonic adj acid	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/06 16:40
-	15153	(\$5ACID NEAR GENERAT\$4)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/07 10:28
-	21	DIFLUORO\$ NEAR SULFONIC	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/06 16:41
-	35	FLUOR\$8 NEAR (ALKANESULFONIC ADJ ACID)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/06 17:19
-	4	(FLUOR\$8 NEAR (ALKANESULFONIC ADJ ACID)) AND (BINDER RESIN RESIST PHOTORESIST)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/06 17:29
-	3	6358665.URPN.	USPAT	2003/08/06 17:21
-	60	CAMERON-JAMES CAMERON-JAMES-F CAMERON-JAMES-FIELD (zydowsky-thomas.in.) (zydowsky-t.in.) (zydowsky-thomas-m.in.)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/07 10:27

-	38	(CAMERON-JAMES CAMERON-JAMES-F CAMERON-JAMES-FIELD (zydowsky-thomas.in.) (zydowsky-t.in.) (zydowsky-thomas-m.in.)) and (resist photoresist resin binder)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/07 10:28
-	15196	(\$5ACID NEAR GENERAT\$4)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/07 10:28
-	26	((CAMERON-JAMES CAMERON-JAMES-F CAMERON-JAMES-FIELD (zydowsky-thomas.in.) (zydowsky-t.in.) (zydowsky-thomas-m.in.)) and (resist photoresist resin binder)) and ((\$5ACID NEAR GENERAT\$4) )	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/07 10:28
-	27	(CAMERON-JAMES CAMERON-JAMES-F CAMERON-JAMES-FIELD (zydowsky-thomas.in.) (zydowsky-t.in.) (zydowsky-thomas-m.in.)) and ((\$5ACID NEAR GENERAT\$4) )	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/07 12:30
-	7	(photoacid near generator) same (phosphoric adj acid)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/07 12:35
-	4518	method same prepar\$4 same (sulfonic adj acid)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/07 12:54
-	1907	onium adj compounds	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/08/07 15:17

L28 ANSWER 2 OF 3 USPAT2 on STN

ACCESSION NUMBER: 2002:78363 USPAT2  
TITLE: Resist composition comprising photosensitive polymer  
having loctone in its backbone  
INVENTOR(S): Yoon, Kwang-sub, Seoul, KOREA, REPUBLIC OF  
Jung, Dong-won, Yongin, KOREA, REPUBLIC OF  
Lee, Si-hyeung, Suwon, KOREA, REPUBLIC OF  
Kim, Hyun-woo, Sungnam, KOREA, REPUBLIC OF  
Lee, Sook, Seoul, KOREA, REPUBLIC OF  
Woo, Sang-gyun, Suwon, KOREA, REPUBLIC OF  
Choi, Sang-jun, Seoul, KOREA, REPUBLIC OF  
PATENT ASSIGNEE(S): Samsung Electronics Co., Ltd., Suwon, KOREA, REPUBLIC  
OF (non-U.S. corporation)

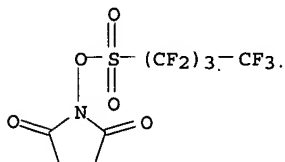
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6537727	B2	20030325
APPLICATION INFO.:	US 2001-901569		20010711 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	KR 2000-39562	20000711
	KR 2000-75485	20001212

DOCUMENT TYPE: Utility  
FILE SEGMENT: GRANTED  
PRIMARY EXAMINER: Baxter, Janet  
ASSISTANT EXAMINER: Thornton, Yvette C.  
LEGAL REPRESENTATIVE: Valentine Francos, PLLC  
NUMBER OF CLAIMS: 18  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)  
LINE COUNT: 739

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 252937-66-9, N-Hydroxysuccinimide nonaflate  
(photoacid generator; chem. amplified ArF-laser photoresist compns.  
having lactone-contg. polymers with good dry etching resistance)  
RN 252937-66-9 USPAT2  
CN 2,5-Pyrrolidinedione, 1-[[[nonafluorobutyl)sulfonyl]oxy]- (9CI) (CA INDEX  
NAME)

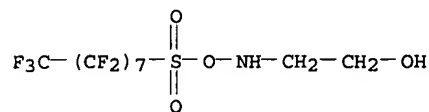


AB A resist composition includes a photosensitive polymer having a lactone  
in its backbone. The photosensitive polymer of the resist composition  
includes at least one of the monomers having the formulae: ##STR1##

where R.sub.1 and R.sub.2 are independently a hydrogen atom, alkyl,  
hydroxyalkyl, alkyloxy, carbonyl or ester, and x, y, v and w are  
independently integers from 1 to 6.

STN Search  
Do Not Remove!

L20 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS on STN  
 RN 3824-49-5 REGISTRY  
 CN Hydroxylamine, O-[(heptadecafluorooctyl)sulfonyl]-N-(2-hydroxyethyl)-  
 (8CI) (CA INDEX NAME)  
 FS 3D CONCORD  
 MF C10 H6 F17 N O4 S

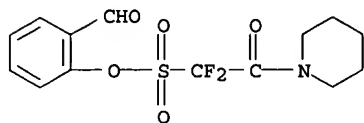


Calculated Properties (CALC)

PROPERTY (CODE)	VALUE	CONDITION	NOTE
Bioconc. Factor (BCF)	494035	pH 1	(1) ACD
Bioconc. Factor (BCF)	494035	pH 4	(1) ACD
Bioconc. Factor (BCF)	494035	pH 7	(1) ACD
Bioconc. Factor (BCF)	494035	pH 8	(1) ACD
Bioconc. Factor (BCF)	494001	pH 10	(1) ACD
Boiling Point (BP)	294.3+/-50.0 deg C	760.0 Torr	(1) ACD
Enthalpy of Vap. (Hvap)	61.95+/-6.0 kJ/mol		(1) ACD
Flash Point (FP)	131.8+/-54.2 deg C		(1) ACD
Freely Rotatable Bonds (FRB)	11		(1) ACD
H acceptors (HAC)	5		(1) ACD
H donors (HD)	2		(1) ACD
Koc (KOC)	413890	pH 1	(1) ACD
Koc (KOC)	413890	pH 4	(1) ACD
Koc (KOC)	413890	pH 7	(1) ACD
Koc (KOC)	413890	pH 8	(1) ACD
Koc (KOC)	413862	pH 10	(1) ACD
logD (LOGD)	7.79	pH 1	(1) ACD
logD (LOGD)	7.79	pH 4	(1) ACD
logD (LOGD)	7.79	pH 7	(1) ACD
logD (LOGD)	7.79	pH 8	(1) ACD
logD (LOGD)	7.79	pH 10	(1) ACD
logP (LOGP)	7.796+/-1.384		(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 1	(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 4	(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 7	(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 8	(1) ACD
Molar Solubility (SLB.MOL)	<0.01 mol/L	pH 10	(1) ACD
Molecular Weight (MW)	559.20		(1) ACD
Vapor Pressure (VP)	0.000171457 Torr	25.0 deg C	(1) ACD

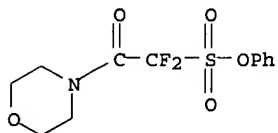
(1) Calculated using Advanced Chemistry Development (ACD) Software Solaris V4.76 ((C) 1994-2003 ACD)

L26 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 476209-50-4 REGISTRY  
CN 1-Piperidineethanesulfonic acid, .alpha.,.alpha.-difluoro-.beta.-oxo-,  
2-formylphenyl ester (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C14 H15 F2 N O5 S  
SR Chemical Library  
LC STN Files: CHEMCATS



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

L26 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2003 ACS on STN  
RN 304884-69-3 REGISTRY  
CN 4-Morpholineethanesulfonic acid, .alpha.,.alpha.-difluoro-.beta.-oxo-,  
phenyl ester (9CI) (CA INDEX NAME)  
FS 3D CONCORD  
MF C12 H13 F2 N O5 S  
SR Chemical Library  
LC STN Files: CHEMCATS



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*